

**Revised Date: 09/09**

**Chem 1041 General Chemistry II Laboratory**

**Course Maximum Enrollment:** 24

**Special Facility or Equipment Needs/Safety Rules and Issues:** Chemistry laboratory appropriately equipped. Safety goggles, lab apron or lab coat, hand towel

**(If applicable) Lab Fee:** none

**Course Description:** Laboratory exploration for Chem 1040.

**Pre- or Co-requisites:** Chem 1040. Pre-requisite a grade of “C” or better in Chem 1030 and Chem 1031.

**Texts and Readings:** Lab Manual: Custom  
General Chemistry: The Essential Concepts 5<sup>th</sup> edition or latest edition (ISBN: 13-978-007-3311-852) *Raymond Chang*, McGraw-Hill Companies.

**Course Goals:** This course is designed to reinforce concepts from the lecture course by giving the students practical experience in laboratory where they can also develop laboratory and safety skills.

**Course Objectives:**

The student should be able to:

- work safely and skillfully in a laboratory environment.
- demonstrate and use the scientific method and methods of measurement in performing experiments and using appropriate calculations in interpreting results.
- use laboratory skills and methods to perform and interpret experiments demonstrating concepts in chemistry.
- use laboratory skills and methods and knowledge of basic chemistry to design and perform simple original experiments and interpret results.

**Course Content/Outline:**

Week 1:	Review safety concepts and safety test; laboratory practices and rules Review scientific method and Measurement
Week 2:	Solutions and solution preparation
Week 3:	Determination of heat capacity; Law of Dulong and Petit
Week 4:	Hess’ Law and calorimetry
Week 5:	Factors affecting reaction rate
Week 6:	Determination of reaction rate from chemical data
Week 7:	Spreadsheet exercise
Week 8:	Midterm examination
Week 9:	Qualitative analysis
Week 10:	Qualitative analysis
Week 11:	Qualitative analysis

Week 12: Qualitative analysis  
Week 13: Qualitative analysis  
Week 14: Review  
Week 15: Final examination

**Assessment:**

Weekly quizzes	100 points
Laboratory reports 10@ 30 points each	300 points
Midterm examination	100 points
Final examination	<u>100 points</u>
Total	600 points

**Reading and Writing Across the Curriculum:** The reading and writing components of these aforementioned assessments satisfies the Reading and Writing Across the Curriculum requirement as stipulated in SLCC's academic policy.

**Grading/absence Policies:**

Course grade will be based on the cumulative points. The recommended scale is:

90% and above	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

Make up examinations and quizzes will be given only to those persons having legitimate excuses. The instructor should be contacted in advance—not after—the examination. It is the discretion of the instructor to accept an excuse. It is the responsibility of the student to arrange with the instructor for make up examinations and quizzes. Typically, make up quizzes will not be given. The lowest quiz grade or a quiz that is missed will be dropped. Students who miss 10% of class meetings will be advised to see a counselor. Students who merely stop attending and chose not to withdraw will earn an “F” for the course.

**Students with Disabilities:** Students with disabilities that may require assistance or accommodation or with questions related to any accommodations for testing, note takers, readers, etc. should contact the instructor as soon as possible. Students may also contact the Dean of Students with questions about such services.

**Emergency Evacuation Procedure:** A map of this floor is posted in the front of the building. This map marks the evacuation route and the Designated Rescue Area. This area is where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Student who may need assistance should identify themselves to the teaching faculty.

**Academic Dishonesty:** A student will receive a grade of zero on an assignment or test for the following: cheating, plagiarism, or collusion. Any student who commits or attempts to commit any of these acts will be subject to disciplinary proceedings as

detailed in the Student Discipline Procedures Outlined in the Student Handbook.